



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

May 31, 2022

Maryanne Kellogg  
Regulatory Consultant  
Duke's Root Control Inc.  
c/o Pyxis Regulatory Consulting Inc.  
4110 136th St. Ct. NW  
Gig Harbor, WA 98332

Subject: Registration Review Label Mitigation for Dichlobenil and Metam-Sodium  
Product Name: Sanafoam Vaporooter II  
EPA Registration Number: 94625-1  
Application Date: 05/14/2019; 12/21/2021  
Decision Number: 584324; 580863

Dear Ms. Kellogg:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Dichlobenil and Metam-Sodium Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently

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approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Darius Stanton by phone at 202-566-2332, or via email at [stanton.darius@epa.gov](mailto:stanton.darius@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington", with a long horizontal flourish extending to the right.

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure

{Note to reviewer: [Text] in brackets denotes optional text.}  
{Note to reviewer: {Text} in braces where in the final label text will appear.}  
{Center Panel – Outer Box Label}

**RESTRICTED USE PESTICIDE**  
**DUE TO ACUTE INHALATION TOXICITY, SKIN IRRITATION AND ACUTE DERMAL TOXICITY TO HUMANS**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

## SANAFOAM<sup>®</sup> VAPOROOTER II

[Alternate Brand Name: Vaporooter]

**A Foaming Fumigant**  
**Rids Sewer Lines of Roots**  
**Will Not Harm Trees, Non-Systemic**

This product contains:

### 1. SANAFOAM VAPOROOTER II Liquid Concentrate

ACTIVE INGREDIENT:	% By Weight
Metam-Sodium (sodium methylthiocarbamate) .....	30.0%
<b>OTHER INGREDIENTS:</b> .....	<u>70.0%</u>
<b>TOTAL:</b> .....	100.0%

### 2. DICHLOBENIL 50 W

ACTIVE INGREDIENT:	% By Weight
Dichlobenil (2,6-dichlorobenzonitrile).....	50.0%
<b>OTHER INGREDIENTS:</b> .....	<u>50.0%</u>
<b>TOTAL:</b> .....	100.0%

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER PELIGRO**

**CAUSES SKIN IRRITATION, SEE OTHER LABEL PRECAUTIONS**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

**EPA Reg. No. 94625-1**

**EPA Est. No.**

Manufactured for:  
Duke's Root Control, Inc.  
1020 Hiawatha Blvd., West  
Syracuse, NY 13204

**Net Contents:**

- 1. SANAFOAM VAPOROOTER II LIQUID CONCENTRATE: 1 Quart, 5 Gal.**
- 2. DICHLOBENIL 50W POWDER: 1.5 oz., 30 oz.**

**ACCEPTED**  
May 31, 2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 94625-1

{Center Panel – (cont'd)}

<b>FIRST AID</b>	
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
Probable mucosal damage may contraindicate the use of gastric lavage.	

**SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON SIDE PANELS  
SEE ADDITIONAL PRECAUTIONARY STATEMENTS ON CONTAINERS INSIDE THIS  
PACKAGE**

{Left Panel – Outer Box Label}

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER**

Corrosive. Causes skin burns. May be fatal if absorbed through the skin. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Harmful if inhaled. Causes moderate eye irritation. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

{Left Panel (Cont.)}

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

1. The following protective clothing and equipment are required to be used by persons actually engaged in carrying out any operations that are likely to involve direct contact with metam-sodium including mixing, loading, equipment calibrations or adjustments, cleaning and repair of application equipment, entering into treated areas, sampling, clean up of spills, rinsate disposal, or any other activities likely to result in direct contact with the product. This protective equipment must also be used for any operations that are carried out within six feet of unshielded, pressurized hoses containing metam-sodium solutions.
  - Splash resistant eye protection
  - Body covering including shirt and long pants or long sleeved clothing. When a closed system is not used, mixers and loader must also wear a chemical-resistant apron or cloth coveralls.
  - Chemical-resistant gauntlet-type gloves and boots
2. The following protective equipment must be worn at all times by persons operating or monitoring application equipment.
  - Chemical-resistant footwear
  - Body covering including shirt and long pants or long sleeved clothing
3. The following protective clothing and equipment must be immediately available at all times for use by persons operating or monitoring application equipment.
  - A properly fit tested NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges; OR a NIOSH-approved full face respirator with OV cartridges; OR a gas mask with OV canisters; OR a powered air purifying respirator with OV cartridges. This equipment must be worn in case of emergencies or leaks when the pungent, rotten egg or sulfur-like odor of metam-sodium is detected.
  - Chemical-resistant gauntlet-type gloves. These must be worn when a person is engaged in carrying out any operation that is likely to involve direct contact with the product, including the operations listed in paragraph No. 1 above.

## **APPLICATION RESTRICTIONS**

Handlers must wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders.

Applicators must use an application nozzle designed to propel the application hose through the sewer using water-jetting capabilities. The nozzle should be designed to allow water to escape under pressure and thereby creating a rocket like effect that both propels the nozzle forward while preparing the roots and pipe for the application of herbicide. Once the hose and nozzle have arrived at the beginning of the herbicide application location the applicator will turn off the water pressure and the spring-loaded nozzle will switch to the foaming application.

The applicator must retrieve the hose hydraulically while applying foaming herbicide within the pipe.

A clean water rinse hose must be positioned to continuously rinse off the application hose as it is extracted from the pipe.

The applicator must shut off the foaming herbicide 50 feet before the applicator nozzle reaches the manhole in order to purge the last of the foaming herbicide from the hose prior to it exiting the manhole.

## **USER SAFETY RECOMMENDATIONS**

### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

{Left Panel (cont.)}

### **USE PRECAUTIONS**

Consideration must be given to all sewer service lines and building elevations and basements for the possibility of foam coming up out of drains. Consideration must be given to distance between houses and sewers to be treated, depth of sewers compared to drains in buildings, line obstructions, broken and empty traps. Drains which may be subject to backup and flooding must be plugged. Follow the directions for measurement and use carefully to avoid using excess foam that may be forced up lateral lines to building drains. Building occupants should exit structures if the rotten egg or sulfur-like odor of metam-sodium is detected. Open windows and ventilate with fans. Flush drains with ample water if the odor comes from them. Use a squeegee, dust pan or wet vacuum and garbage bags for spills or backups and dispose of foam and liquid, wash area of spill or back up with water and detergent and flush down drain. If rugs or cloth are contacted, take outside and dry before laundering separately.

Avoid any entry into manholes or confined areas. When absolutely necessary to enter these areas, be sure to use all safety protection equipment and procedures as required by law.

### **USE RESTRICTIONS**

Do not use in confined areas without adequate ventilation.

{Left Panel (cont.)}

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to mammals, birds, aquatic invertebrates and fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Equipment washwaters and wastes resulting from the use of this product must be disposed of onsite according to the label directions for use or at an approved water disposal facility. Do not use in potable water systems. Do not use in storm, field or other drains unless effluent is treated in a sanitary sewer system. Keep off lawns and plants as they may be severely injured. Foam should be shoveled off planted areas immediately rather than washing off with water.

### **USE PRECAUTIONS NEAR TREATMENT PLANTS**

Divide large scale applications to sewage collection systems in proximity to a treatment plant into smaller sectional treatments done at one or two day intervals to minimize effects on the sewage treatment process. Inform appropriate wastewater treatment plant officials prior to use so they may check for any unusual rotten egg or sulfur-like odor of metam-sodium above that of sewage and monitor the performance of filter beds or digesters. If the odor is detected at the sewage treatment plant or the biological breakdown process is adversely affected, cease root control applications until normal conditions are established. Reduce subsequent treatments in size or volume and spread over greater time intervals.

### **USE RESTRICTIONS NEAR TREATMENT PLANTS**

This product must be used only where wastewater treated for root control will be processed through a wastewater treatment facility.

Applicators must notify downstream waste water treatment facilities [at least] 24 hours prior to the start of metam-sodium/dichlobenil applications so that they may monitor the operations of the wastewater treatment plant.

Applicators must report how much product will be applied to the sewage system to operators of downstream water treatment plants and to inform these operators that high concentrations of these chemicals in wastewater may adversely affect the biological sewage breakdown process in wastewater treatment plants.

Never exceed the daily use of more than 15 gallons of Sanafoam Vaporooter II Liquid Concentrate for each million gallons of sewage flow (MGD) into the wastewater treatment plant (WWTP). *Example:* Inflow into the WWTP is 2.4 MGD, therefore, use a maximum of 36 gallons (2.4 x 15) of Sanafoam Vaporooter II per day. When Vaporooting within one mile distance of the WWTP or when applying at night reduce the maximum application use by 50 % to 18 gallons (36 x .5). The above maximum daily use must extend over an eight hour work period.

### **PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flames.

{Left Panel (cont.)}

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

**PESTICIDE STORAGE:** Do not store near food or feed, seeds, bulbs, tubers, nursery stock or other vegetative matter. Do not store near pet or livestock quarters. Store in a cool, dry, and well ventilated area. Keep containers tightly closed when not in use.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site by discharging into sewer pipes being treated or at an approved waste disposal facility.

**CONTAINER DISPOSAL (PLASTIC CONTAINER):** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**CONTAINER DISPOSAL (WSP PACKAGING):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken.

**OUTER BOX:** Dispose of empty box in a sanitary landfill or by incineration or, if allowed by state and local law, by burning. If burned, stay out of smoke.

### PRODUCT INFORMATION

SANAFOAM VAPOROOTER II is a foaming, surface-active formulation of metam-sodium plus DICHLOBENIL 50W for dilution in water.

SANAFOAM VAPOROOTER II is a non-systemic chemical for control of roots in sewer mains and drain lines. Only the roots and organic deposits in the sewer lines are affected by SANAFOAM VAPOROOTER II liquid concentrate.

SANAFOAM VAPOROOTER II is packaged to contain separate units within an outer fiberboard container; a foil bag of dichlobenil herbicide powder and a plastic container holding the SANAFOAM VAPOROOTER II Liquid Concentration.

SANAFOAM VAPOROOTER II must not be used to treat roots in storm sewers or other drains where the wastewater will not be treated or controlled.

{Right Panel – Outer Box Label}

### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Refer to the Personal Protective Equipment (PPE) section under PRECAUTIONARY STATEMENTS and use all required protective clothing and equipment. The metam-sodium and dichlobenil components must be used in combination and with a foaming agent (contained in the liquid concentrate) to control roots in sewer systems according to the directions for use.

#### **DIRECTIONS FOR USE OF SANAFoAM VAPOROOTER II WITH FOAMAKER GENERATORS**

A. DETERMINE WHICH OF THE COLLECTION LINES HAVE KNOWN ROOT PROBLEMS.

1. SURVEY TREATMENT AREA

Confirm the line size and length. Evaluate slope, flow, lateral connections, line length, outfall, line obstructions, terrain and other field conditions. A thorough evaluation prior to starting will assure safe and accurate application of SANAFoAM VAPOROOTER II.

2. DETERMINE QUANTITY OF FOAM NEEDED

From Table 1 compute the quantity of foam required to fill the length of pipe (in feet) to be treated.

{Right Panel (cont.)}

**TABLE 1. Foam Requirements and Hose Retrieval Rates for SANAFoam VAPOROOTER II APPLICATIONS**

<b>Pipe I.D. (inches)</b>	<b>Foam Capacities (gal./ft.)</b>	<b>Retrieval Rate (sec./10 ft.)</b>
4	0.7	4.2
6	1.5	9.0
8	2.5	15.0
9	3.3	20.0
10	4.1	24.0
12	5.9	36.0
15	9.2	55.0
16	10.4	62.0
18	13.2	78.0
21	18.0	108.0
24	23.5	141.0
27	29.7	178.0

Example: An 8" pipe requires 2.5 gallons of foam per foot to fill the pipe. Therefore, 3750 gallons of foam are required to fill an 8 inch pipe 1500 feet in length (1500 ft. x 2.5 gal/ft. = 3750 gal).

{Right Panel (cont.)}

3. MEASUREMENT DIRECTIONS TO PRODUCE DESIRED QUANTITY OF FOAM

**TABLE 2. Mixing Instructions for Diluting SANAFOAM VAPOROOTER II LIQUID CONCENTRATE**

<b>Foam Requirement</b>	<b>Total Mix Volume</b>	<b>Water</b>	<b>Sanafoam Vaporooter II</b>
100 gal.	5.25 gal.	5 gal.	1.0 qt.
125 gal.	6.25 gal.	6 gal.	1.0 qt.
200 gal.	10.5 gal.	10 gal.	2.0 qt.
250 gal.	12.5 gal.	12 gal.	0.5 gal.
500 gal.	25.0 gal.	24 gal.	1.0 gal.
700 gal.	36.75 gal.	35 gal.	1.75 gal.
800 gal.	42.0 gal.	40 gal.	2.0 gal.
1000 gal.	52.5 gal.	50 gal.	2.5 gal.
1250 gal.	62.5 gal.	60 gal.	2.5 gal.
1400 gal.	73.5 gal.	70 gal.	3.0 gal.
1600 gal.	84.0 gal.	80 gal.	4.0 gal.
2500 gal.	125.0 gal.	120 gal.	5.0 gal.
3750 gal.	187.5 gal.	180 gal.	7.5 gal.
5000 gal.	250.0 gal.	240 gal.	10.0 gal.

Example: 180 gallons of water plus 7.5 gallons of Sanafoam Vaporooter II solution will produce 3750 gallons of foam.

{Right Panel (cont.)}

## **INSTRUCTIONS FOR USING WATER SOLUBLE PACKAGES DIRECTLY INTO SPRAY TANKS:**

Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

### Handling Instructions

Follow these steps when handling pesticide products in WSPs.

1. Mix in spray tank only.
2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
3. Keep the WSP(s) in outer packaging until just before use.
4. Keep the WSP dry prior to adding to the spray tank.
5. Handle with dry gloves and according to the label instructions for PPE.
6. Keep WSP intact. Do not cut or puncture WSP.
7. Reseal the WSP outer packaging to protect any unused WSP(s).

### Mixing Instructions

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
3. Stop adding water and stop any agitation.
4. Place intact/unopened WSP(s) into the tank.
5. Do not spray water from a hose or fill pipe to break or dissolve the WSP(s).
6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.
7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
8. Stop agitation before tank lid is opened.

9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.

10. Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.

11. Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.

12. Use the spray solution when mixing is complete.

13. Maintain agitation of the diluted pesticide mix during transport and application.

14. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.

#### ENGINEERING CONTROLS STATEMENT

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607(d)]. Mixers and loaders handling this product while it is enclosed in intact water soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks, a chemical-resistant apron, and chemical-resistant gloves. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for “applicators and other handlers” and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.”

{Right Panel (cont.)}

**[Note to Reviewer:** *The Mixing Procedures provided below are for product packaged as 5 gallon Sanafoam Vaporooter II Liquid Concentrate and 30 oz. dichlobenil water soluble bag]*

#### **4. MIXING PROCEDURES: TANK MIX**

1. Fill the Foamaker Equipment mix tank  $\frac{1}{4}$  to  $\frac{1}{2}$  full of clean water leaving room in the tank for the rinse water to be used as described below.
2. Open outer fiberboard container and remove the foil bag containing the dichlobenil herbicide.
3. Remove the 5 gallon inner container containing the Sanafoam Vaporooter II Liquid Concentrate as needed.
4. Remove the Dichlobenil 50W water soluble inner bag from the labeled protective outer foil bag.
5. Place the unopened water soluble bag through the access lid and into the water in the mix tank as needed.
6. Allow about 7 minutes for the bag to dissolve and the powder to thoroughly mix.
7. Transfer the liquid from the 5 gallon container as necessary into the Foamaker solution mix tank using the suction pump system on the Foamaker.
8. Triple rinse the 5 gallon liquid container (again using the suction pump system to add the rinse water to the mix tank).
9. Add to the mix tank the remainder of the required water and mix thoroughly.
10. Dispose of containers in accordance with disposal instructions.

**[Note to Reviewer:** *The Mixing Procedures provided below are for product packaged as 1 quart Sanafoam Vaporooter II Liquid Concentrate and 1.5 oz. dichlobenil water soluble bag]*

#### **4. MIXING PROCEDURES: TANK MIX**

1. Open outer fiberboard container and remove foil bag containing the dichlobenil herbicide.
2. Remove plastic inner container containing the Sanafoam Vaporooter II Liquid Concentrate.
3. Carefully add contents of the foil bag to the liquid concentrate container of Sanafoam Vaporooter II. Mix thoroughly until dichlobenil powder is completely mixed.
4. Transfer the mixture into the Foamaker solution tank. The tank should contain the correct amount of water.
5. Rinse container and add rinse water to contents of solution tank.
6. Dispose of container in accordance with disposal instructions.

**[Note to Reviewer:** *The Mixing Procedures provided below are for product packaged as 5 gallon Sanafoam Vaporooter II Liquid Concentrate and 30 oz. dichlobenil water soluble bag]*

#### **4. MIXING PROCEDURES: ON DEMAND/INLINE MIX**

1. Fill the Dichlobenil mix tank with five gallons of water.
2. Open outer fiberboard container and remove foil bag containing the Dichlobenil 50W herbicide.
3. Remove the Dichlobenil 50W water soluble inner bag from the labeled protective outer foil bag. **DO NOT OPEN THE WATER SOLUBLE BAG.**
4. Place the unopened water soluble bag through the access lid and into the water in the Dichlobenil mix tank as needed.
5. Run the mixer on the Dichlobenil mix tank and allow 7 minutes for the bag to dissolve and the powder to thoroughly mix.

6. Remove the 5 gallon inner container containing the Sanafoam Vaporooter II Liquid Concentrate as needed.
7. Connect the liquid from the 5 gallon container to the suction pump on the Foamaker.
8. Triple rinse the 5 gallon liquid container using the wash down hose.
9. Add rinsate to the Dichlobenil mix tank and mix thoroughly.
10. Puncture liquid pesticide container to prevent reuse.
11. Dispose of triple rinsed, punctured, empty container in accordance with the container disposal directions on this label.

USE SOLUTION PROMPTLY AFTER MIXING. Wash and flush all equipment with water after each day's use.

KEEP OFF DESIRABLE LAWNS AND PLANTS. If spillage occurs on the street or other paved areas near growing plants, immediately flush the spill thoroughly with water at moderate pressure into the sewer line.

{Right Panel (cont.)}

### **APPLICATION GUIDELINES FOR SANAFoAM VAPOROOTER II**

1. **TO APPLY FOAM TO MAIN LINES:** Insert foam discharge hose through entire section of line to be treated. Start foam generating equipment and withdraw discharge hose at a rate calibrated to fill the pipe line to capacity (as listed in Table 1), until foam appears at input manhole. Use appropriate foam application equipment designed to produce required foam volume.

You may multiply the retrieval rates in Table 1 by 1.10 to allow for some treatment of laterals (about 3-6 feet) and to allow more foam to push into cracks and broken joints.

2. **IF TREATING A BUILDING LATERAL:** Be sure foam application discharge hose is also of a specialized type and is securely positioned into and inflated in the clean-out to prevent foam overflow and/or plug blowout. Operate foam generating equipment until required amount of foam has been produced, as calculated from information in Table 1.

**NOTE:** Do not overfill lateral.

FOAMAKER Generators produce 20 gallons of foam from each gallon of Sanafoam Vaporooter II mixed solution.

FOAMAKER Generators are manufactured for Duke's Root Control Inc. to our specifications and are available from Duke's Root Control Inc..

For additional information on special applications contact sales representative of manufacturer. All application procedures must be in accordance with established methods and systems as developed by Duke's Root Control Inc.

### **WARRANTY STATEMENT**

To the extent consistent with applicable law, Duke's Root Control Inc. makes no warranty, expressed or implied, including the warranties of merchantability and/or fitness for any particular purpose, concerning this material, except for those which are contained on this label.

[EPA approval date]

{Center Front Panel – Inner Dichlobenil Label}

**RESTRICTED USE PESTICIDE  
DUE TO ACUTE TOXICITY**

**For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.**

**DICHLORBENIL | GROUP 20 | HERBICIDE**

**DICHLORBENIL 50 W**

[Alternate Brand Name: Vaporooter]

(FOR USE IN SANAFoAM VAPOROOTER II FoAM APPLICATIONS)

<b>ACTIVE INGREDIENT:</b>	<b>% By Weight</b>
Dichlobenil (2,6-dichlorobenzonitrile).....	50.0%
<b>OTHER INGREDIENTS:</b> .....	50.0%
<b>TOTAL:</b> .....	100.0%

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See additional precautionary statements on side panels.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This package contains one 30 oz. [optional text: one 1.5 oz.] water soluble inner bag for direct addition to the equipment mix tank when making foam applications of SANAFoAM VAPOROOTER II. See the outer box label for additional precautions, complete labeling, and instructions for use in SANAFoAM VAPOROOTER II.

**EPA Reg. No. 94625-1**

**EPA Est. No.**

**Manufactured for:**

Duke's Root Control Inc.  
1020 Hiawatha Blvd., West  
Syracuse, NY 13204

**Net Weight:** 1.5 oz., 30 oz.

{Left Front Panel – Inner Dichlobenil Label}

<b>FIRST AID</b>	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
<p>For additional information in case of emergency call toll free (1-800-858-7378). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Mixers, loaders, applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves such as barrier laminate, or polyethylene, or polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils, or butyl rubber >14 mils, or natural rubber >14 mils, or neoprene rubber >14 mils or nitrile rubber >14 mils
- Chemical-resistant apron when mixing and loading

**User Safety Requirements:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

{Right Front Panel – Inner Dichlobenil Label}

### ENVIRONMENTAL HAZARDS

Keep out of lakes, ponds or streams. Toxic to fish and aquatic life. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Equipment washwaters and wastes resulting from the use of this product may be disposed of on site according to label directions or at an approved waste disposal facility. Do not use in potable sewer systems. Do not use in storm, field or other drains until effluent is treated in a sanitary sewer system. Keep off lawns and plants as they may be severely injured. Foam should be shoveled off planted areas immediately rather than washing off with water.

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow may result in ground-water contamination.

### USE PRECAUTIONS

See the outer box label for additional precautions, complete labeling, and instructions for use in SANAFOAM VAPOROOTER II.

### USE RESTRICTIONS

When used in inhabited buildings (residences, offices, hospitals, etc.) windows must be open or an exhaust fan must be operating during the application.

This product must be used only where wastewater treated for root control will be processed through a wastewater treatment facility. Applicators must notify downstream wastewater treatment facilities [at least] 24 hours prior to the start of dichlobenil applications so that they may monitor the operations of the wastewater treatment plant. Applicators must report how much product will be applied to the sewage system to operators of downstream water treatment plants and to inform these operators that high concentrations of these chemicals in wastewater may adversely affect the biological sewage breakdown process in wastewater treatment plants.

### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flames.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

**PESTICIDE STORAGE:** Do not store near food or feed, seeds, bulbs, tubers, nursery stock or other vegetative matter. Do not store near pet or livestock quarters. Store in a cool, dry, and well ventilated area. Do not open the protective foil pouch until water soluble bags are needed.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site by discharging into sewer pipes being treated or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken.

***[Note to reviewer (optional text): Container Disposal language below will appear on labeling of fiber drums containing water-soluble bags transported to the final packaging establishment]***

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into processing equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

[EPA approval date]

{Center Panel – Inner Metam-Sodium Label}

**RESTRICTED USE PESTICIDE**  
**DUE TO ACUTE INHALATION TOXICITY, SKIN IRRITATION AND ACUTE DERMAL TOXICITY TO HUMANS**

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

## SANAFOAM VAPOROOTER II

[Alternate Brand Name: Vaporooter]

### LIQUID CONCENTRATE

(FOR USE IN SANAFOAM VAPOROOTER II FOAM APPLICATIONS)

ACTIVE INGREDIENT:	% By Weight
Metam-Sodium (sodium methyldithiocarbamate) .....	30.0%
<b>OTHER INGREDIENTS:</b> .....	<u>70.0%</u>
<b>TOTAL:</b> .....	100.0%

Contains 2.90 lbs. active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN DANGER PELIGRO

### CAUSES SKIN IRRITATION, SEE OTHER LABEL PRECAUTIONS

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

SEE PRECAUTIONARY STATEMENTS ON SIDE PANELS.

**EPA Reg. No. 94625-1**

**EPA Est. No.**

**Manufactured for:**  
Duke's Root Control, Inc.  
1020 Hiawatha Blvd., West  
Syracuse, NY 13204

**Net Contents: 1 Quart, 5 Gal.**

{Left Side Panel – Inner Metam Label}

<b>FIRST AID</b>	
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
For additional information in case of emergency call toll free (1-800-858-7378). Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>NOTE TO PHYSICIAN</b>	
Probable mucosal damage may contraindicate the use of gastric lavage.	

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMAN AND DOMESTIC ANIMALS  
DANGER**

Corrosive. Causes skin burns. May be fatal if absorbed through the skin. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Harmful if inhaled. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

{Right Side Panel – Inner Metam Label}

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

1. The following protective clothing and equipment are required to be used by persons actually engaged in carrying out any operations that are likely to involve direct contact with metam-sodium including mixing, loading, equipment calibrations or adjustments, cleaning and repair of application equipment, entering into treated areas, sampling, clean up of spills, rinsate disposal, or any other activities likely to result in direct contact with the product. This protective equipment must also be used for any operations that are carried out within six feet of unshielded, pressurized hoses containing metam-sodium solutions.
  - Splash resistant eye protection
  - Body covering including shirt and long pants or long sleeved clothing. When a closed system is not used, mixers and loader must also wear a chemical-resistant apron or cloth coveralls.
  - Chemical-resistant gauntlet-type gloves and boots
  
2. The following protective equipment must be worn at all times by persons operating or monitoring application equipment.
  - a. Chemical-resistant footwear
  - b. Body covering including shirt and long pants or long sleeved clothing
    - i. The following protective clothing and equipment must be immediately available at all times for use by persons operating or monitoring application equipment.
      - A properly fit tested NIOSH- or MSHA- approved half face respirator with organic vapor cartridge(s) plus splash resistant eye protection or NIOSH- or MSHA- approved full face respirator with organic vapor cartridge(s). This equipment must be worn in case of emergencies or leaks when the pungent, rotten egg or sulfur-like odor of metam-sodium is detected.
      - Chemical-resistant gauntlet-type gloves. These must be worn when a person is engaged in carrying out any operation that is likely to involve direct contact with the product, including the operations listed in paragraph No. 1 above.

## **APPLICATION RESTRICTIONS**

Handlers must wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders.

Applicators must use an application nozzle designed to propel the application hose through the sewer using water-jetting capabilities. The nozzle should be designed to allow water to escape under pressure and thereby creating a rocket like effect that both propels the nozzle forward while preparing the roots and pipe for the application of herbicide. Once the hose and nozzle have arrived at the beginning of the herbicide application location the applicator will turn off the water pressure and the spring-loaded nozzle will switch to the foaming application.

The applicator must retrieve the hose hydraulically while applying foaming herbicide within the pipe.

A clean water rinse hose must be positioned to continuously rinse off the application hose as it is extracted from the pipe.

The applicator must shut off the foaming herbicide 50 feet before the applicator nozzle reaches the manhole in order to purge the last of the foaming herbicide from the hose prior to it exiting the manhole.

## **USER SAFETY RECOMMENDATIONS**

### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

{Right Side Panel – Inner Metam Label}

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to mammals, birds, aquatic invertebrates and fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Equipment washwaters and wastes resulting from the use of this product must be disposed of onsite according to the label directions for use or at an approved water disposal facility. Do not use in potable water systems. Do not use in storm, field or other drains unless effluent is treated in a sanitary sewer system. Keep off lawns and plants as they may be severely injured. Foam should be shoveled off planted areas immediately rather than washing off with water.

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This package contains a metam-sodium liquid concentrate for addition to the equipment mix tank when making foam applications of SANAFoam VAPOROOTER II. See the outer box label for additional precautions, complete labeling, and instructions for use in SANAFoam VAPOROOTER II.

### **RESTRICTIONS**

Applicators must notify downstream waste water treatment facilities [at least] 24 hours prior to the start of metam-sodium applications so that they may monitor the operations of the wastewater treatment plant.

Applicators must report how much product will be applied to the sewage system to operators of downstream water treatment plants and to inform these operators that high concentrations of these chemicals in wastewater may adversely affect the biological sewage breakdown process in wastewater treatment plants.

### **PHYSICAL OR CHEMICAL HAZARDS**

Do not use or store near heat or open flames.

{Right Side Panel (cont.) – Inner Metam Label}

#### **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Do not store near food or feed, seeds, bulbs, tubers, nursery stock or other vegetative matter. Do not store near pet or livestock quarters. Store in a cool, dry, and well ventilated area.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on-site by discharging into sewer pipes being treated or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**OUTER BOX:** Dispose of empty box in a sanitary landfill or by incineration or, if allowed by state and local law, by burning. If burned, stay out of smoke.

[EPA approval date]